

YEAR OF CLEAN WATER

Water Education Weekly Drops

Week 7

Lead in Your Drinking Water

Lead poisoning is a top environmental health hazard for young children, affecting as many as one million children age five and under. Children are at great risk in the early years of their life. The intellectual and behavioral damage done to children can be prevented but, once done, cannot be reversed.

This is why our Safe Drinking Water Act Branch, Office of Compliance and

Enforcement has made lead in drinking water one of the top focus areas of the branch. The priority, to be able to reach young children before any damage has occurred, is to work with the schools and day care centers. Currently the Office is working with the School District of Philadelphia and local day care centers. Efforts will continue to reach other regional schools and day care centers to encourage them to voluntarily test for lead poisoning in the water in their buildings. Prevention of Lead Poisoning is the only way.

http://www.epa.gov/region03/safewater/lead

(The site is not live yet, but can be viewed on the Region III Intranet)

Q: How could lead get into my drinking water?

Typically, lead gets into your water after the water leaves your local treatment plant or your well. That is, the source of lead in your home's water is most likely pipe or solder in your home's own plumbing. The most common cause is corrosion, a reaction between the water and the lead pipes or solder. Dissolved oxygen, low pH (acidity) and low mineral content in water are common causes of corrosion. All kinds of water, however, may have high levels of lead. One factor that increases corrosion is the practice of grounding electrical equipment (such as telephones) to water pipes. Any electric current traveling through the ground wire will accelerate the corrosion of lead in the pipes. (Nevertheless, wires should not be removed from pipes unless a qualified electrician installs an adequate alternative grounding system.)

Q. What percentage of a person's exposure to lead comes from drinking water?

(answer at bottom of page)

- A. 0%
- B. 10-20%
- C. 40-50%
- Q. What percentage of a mixed-formula fed infant's exposure to lead comes from drinking water? (answer at bottom of page)
 - A. 0%
 - B. 10-30%
 - C. 40-60%
- Q: What are two easy ways to reduce your risk from lead in drinking water?
 - **1. Flush Your Pipes Before Drinking**. Anytime the water in a particular faucet has not been used for six hours or longer, "flush" your cold-water pipes by running the water until it becomes as cold as it will get. (This could take as little as five to thirty seconds if there has been recent heavy water use such as showering or toilet flushing. Otherwise, it could take two minutes or longer.) The more time water has been sitting in your home's pipes, the more lead it may contain.
 - **2. Only Use Cold Water for Consumption** Use only water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead. The two actions recommended above are very important to the health of your family. They will probably be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house, not from the local water supply.

Answers:

Q. What percentage of a person's exposure to lead comes from drinking water?

B. 10-20% While dust from paint and soil contribute the most to a person's exposure, a person can ingest lead with drinking water too.

Q. What percentage of a mixed-formula fed infant's exposure to lead comes from drinking water?

C. 40-60% Small children who are given formula that was prepared with lead-contaminated water (either from the plumbing or heated in lead-lined pots) can get over 50% of their exposure to lead from their diets.

For further information, contact: Lisa Donahue, WPD (215) 814-2062

For questions on the Water Drops, call Nan L. Ides (215) 814-5546